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Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

APPLICATION NO.

FILING DATE

## Office Action Summary

Application No. 09/788,047 Applicant(s)

Nishioka et al.

Examiner

Rabon Sergent

Group Art Unit 1711

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Responsive to communication(s) filed on			
☐ This action is <b>FINAL</b> .			
☐ Since this application is in condition for allowance except for for in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C	ormal matters, prosecution as to the merits is closed C.D. 11; 453 O.G. 213.		
A shortened statutory period for response to this action is set to e is longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extensions 37 CFR 1.136(a).	respond within the period for response will cause the		
Disposition of Claims			
	is/are pending in the application.		
Of the above, claim(s)	is/are withdrawn from consideration.		
☐ Claims	are subject to restriction or election requirement.		
Application Papers			
☐ See the attached Notice of Draftsperson's Patent Drawing F	Review, PTO-948.		
☐ The drawing(s) filed on is/are objected	to by the Examiner.		
☐ The proposed drawing correction, filed on	is □approved □disapproved.		
☑ The specification is objected to by the Examiner.			
$\hfill\Box$ The oath or declaration is objected to by the Examiner.			
Priority under 35 U.S.C. § 119			
Acknowledgement is made of a claim for foreign priority un			
	ne priority documents have been		
⊠ received.			
<ul> <li>☐ received in Application No. (Series Code/Serial Number</li> <li>☐ received in this national stage application from the Interest of the Int</li></ul>			
*Certified copies not received:	terrational bureau (FCT Nuie 17.2(a)).		
☐ Acknowledgement is made of a claim for domestic priority i	under 35 U.S.C. § 119(e).		
Attachment(s)			
☑ Notice of References Cited, PTO-892			
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s	s)		
☐ Interview Summary, PTO-413			
Notice of Draftsperson's Patent Drawing Review, PTO-948			
☐ Notice of Informal Patent Application, PTO-152			
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SEE OFFICE ACTION ON THE	FOLLOWING PAGES		

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1. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The word, "distillation", lacks antecedent basis. It is unclear how "distillation" is incorporated into the method.

2. The disclosure is objected to because of the following informalities: The sentence bridging pages 25 and 26 of the specification appears to be incorrect, because applicants state that as diketene concentration decreases, hue increases.

Appropriate correction is required.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller ('299) or Mueller et al ('566 or '799), each in view of Niijima et al. ('365).

The primary references disclose the polymerization of tetrahydrofuran in the presence of acid anhydrides, such as acetic anhydride, and catalysts to yield polyethers, including polyether glycol.

- 5. The primary references are silent regarding the diketene content of the anhydride; however, highly purified acetic anhydrides were known at the time of invention. Niijima et al. disclose acetic anhydrides which have been purified by subjecting the anhydride to an ozone treatment and a subsequent distillation treatment. The position is taken that the acetic anhydrides of Niijima et al contain diketene contents of 10 ppm or less. Applicants' comparative examples support this position.
- 6. The position is taken that it would have been obvious to one of ordinary skill to utilize the purified acetic anhydrides of Niijima et al. within the process of the primary references, because one would have been motivated to utilize extremely pure reactants in an effort to obtain a final product of high purity.
- 7. The subject matter of claims 2 and 5-7 is considered to be allowable over the prior art of record.
- 8. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

Sergent:mv

July 20, 2001